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(19) **United States**(12) **Patent Application Publication**
Previtali et al.(10) **Pub. No.: US 2016/0211184 A1**(43) **Pub. Date: Jul. 21, 2016**(54) **METHOD FOR MAKING A THREE
DIMENSIONAL INTEGRATED ELECTRONIC
CIRCUIT**(52) **U.S. Cl.**CPC *H01L 21/84* (2013.01); *H01L 27/0694*
(2013.01); *H01L 21/823871* (2013.01); *H01L*
27/0251 (2013.01)(71) Applicant: **Commissariat a l'energie atomique et
aux energies alternatives**, Paris (FR)(72) Inventors: **Bernard Previtali**, Grenoble (FR);
Maud Vinet, Claix (FR)(73) Assignee: **Commissariat a l'energie atomique et
aux energies alternatives**, Paris (FR)(21) Appl. No.: **14/993,598**(22) Filed: **Jan. 12, 2016**(30) **Foreign Application Priority Data**

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Publication Classification(51) **Int. Cl.***H01L 21/84* (2006.01)*H01L 21/8238* (2006.01)*H01L 27/02* (2006.01)*H01L 27/06* (2006.01)(57) **ABSTRACT**A method for making a three-dimensional integrated elec-
tronic circuit comprising steps for:making a first electrically conductive portion on a first
dielectric layer covering a first semiconductor layer;
thenmaking a second dielectric layer covering the first electri-
cally conductive portion such that the first electrically
conductive portion is arranged between the first and
second dielectric layers, and a second semiconductor
layer arranged on the second dielectric layer; thenmaking a first electronic component in the second semi-
conductor layer, and a second electronic component in
the first semiconductor layer; thenmaking an electrical interconnection electrically linking
the first and second electronic components together, of
which a first part passes through the first dielectric layer
and electrically connects the second electronic compo-
nent to the first electrically conductive portion and of
which a second part passes through a part of the second
dielectric layer and electrically connects the first elec-
tronic component to the first electrically conductive por-
tion.